

Assessing the Cost-Effectiveness of Electric Sector Mercury Control Policies

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In December 2000, the U.S. Environmental Protection Agency released its determination to regulate mercury from coal- and oil-fired power plants in the U.S. Since then, a number of different approaches to mercury emissions controls have been openly discussed, including MACT requirements with and without source category segmentation, and cap-and-trade programs. Most of the policy discussions have centered around issues of technological feasibility and program cost. Relatively little analysis has been focused on the question of how policies may differ in terms of their cost-effectiveness. In this presentation, we will summarize preliminary work to develop a framework for assessing mercury control cost-effectiveness. The framework integrates information from the EPMM cost and emissions model, the ICR data on emissions speciation, the CTM model of mercury fate and transport, and the NHANES consumption and exposure data. It produces outputs such as expenditures per avoided fetal exposure above the reference dose. Such measures of cost-effectiveness can be compared for various policy alternatives for controlling power plant emissions. Preliminary results will be presented for a policy emulating the mercury provisions of the Clear Skies Act.